

## Presented to the Drug Lab Meeting 1/6/11

### Major considerations for maintaining the integrity of a GHB sample

- 1) Analysis must be performed as rapidly as possible. Delivery from police department must include a history of its handling
- 2) Police evidence officers and detectives must be trained in the proper handling of the sample from crime scene retrieval to delivery at the State Lab.
- 3) The evidence office will immediately turn custody of the sample over to the GHB chemist for processing

### Conditions for Police Handling

- 1) material from different containers or retrieval locations must be isolated as separate submissions
- 2) an estimation of volume and appearance at retrieval and at the time of submission is noted. The color and clarity report are important. Original color may indicate the matrix within which the suspect GHB is suspended; i.e., brown (whiskey) red/purple (wine). The clarity may indicate insoluble matter (exogenous salts or bacterial decay of nascent sugars.).

### Immediate laboratory concerns.

- 1) integrity of the submission is reviewed in the usual manner
- 2) volume and appearance are scored for color, clarity and viscosity.
- 3) pH is taken
- 4) consideration is given for the amount of sample available regarding the classic technique of splitting the sample prior to testing.
- 5) analysis begins on an appropriate split of sample
- 6) unused sample is refrigerated

### To control for transesterification and heighten resolution of chromatography:

- 1) centrifuge the sample for ten minutes at  $> 5000$  rpm, supernatant is used for testing
- 2) pass supernatant through  $0.45 \mu\text{m}$  syringe filter
- 3) remove co-eluting sugars without an alkali system or raising the pH in any other manner
- 4) extraction/isolation must be at ambient room temperature, optimally below  $70^\circ\text{F}$

mgl updated 12-10-10